Lay of the Land and Critical Issues Background and Key Issues for the U.S.

Overview U.S. School System and School Experience

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Overview U.S. School System and School Experience

- The Role of School Districts: Structures and Leadership
- The relationship between districts and state policy: The Case of Tucson, Arizona
- Understanding Key Differences between U.S. and Finnish Schools
- Questions and Reactions

The Role of School Districts: Structures and Leadership

National

U.S. Department of Education

State

Maryland State Department of Education

Local Systems

Baltimore County Public Schools

The Role of School Districts: Structures and Leadership

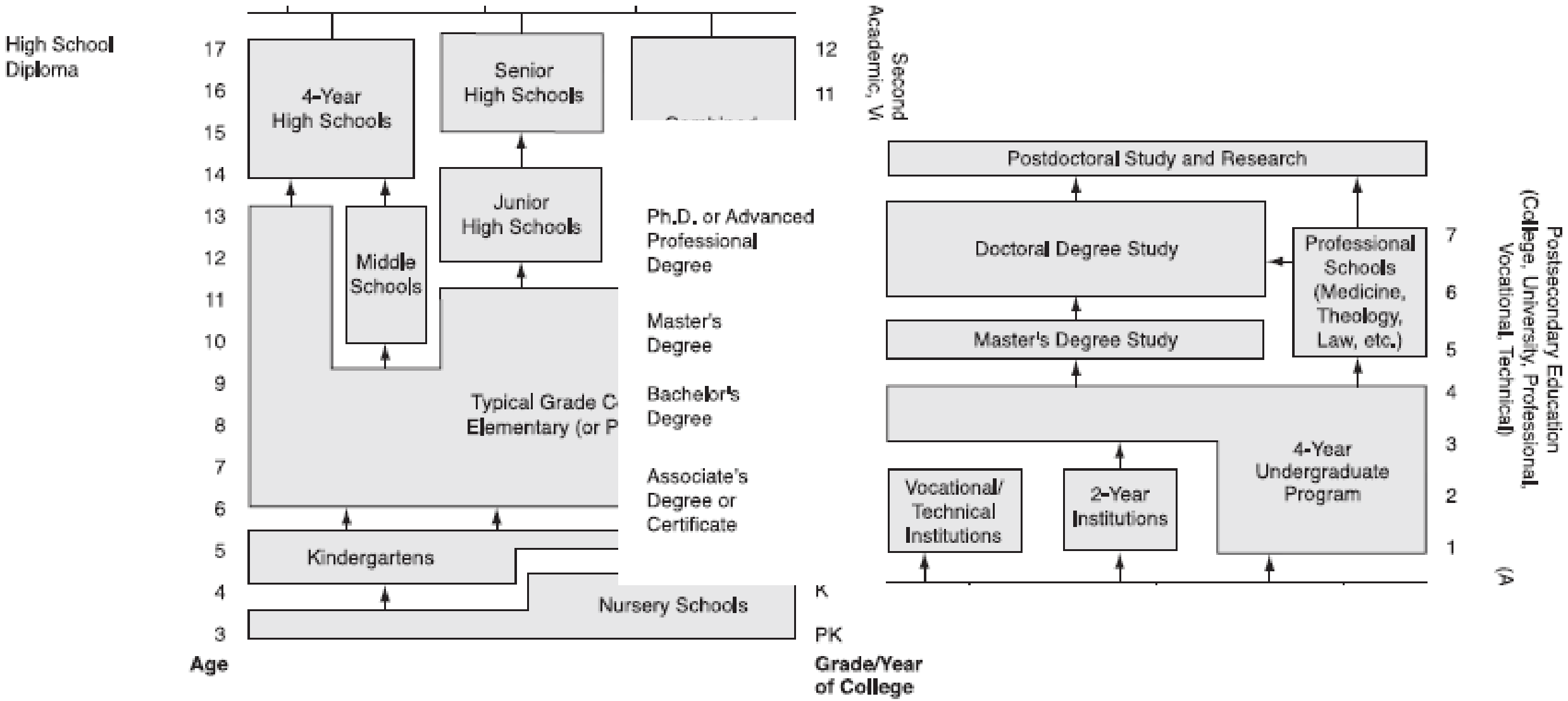
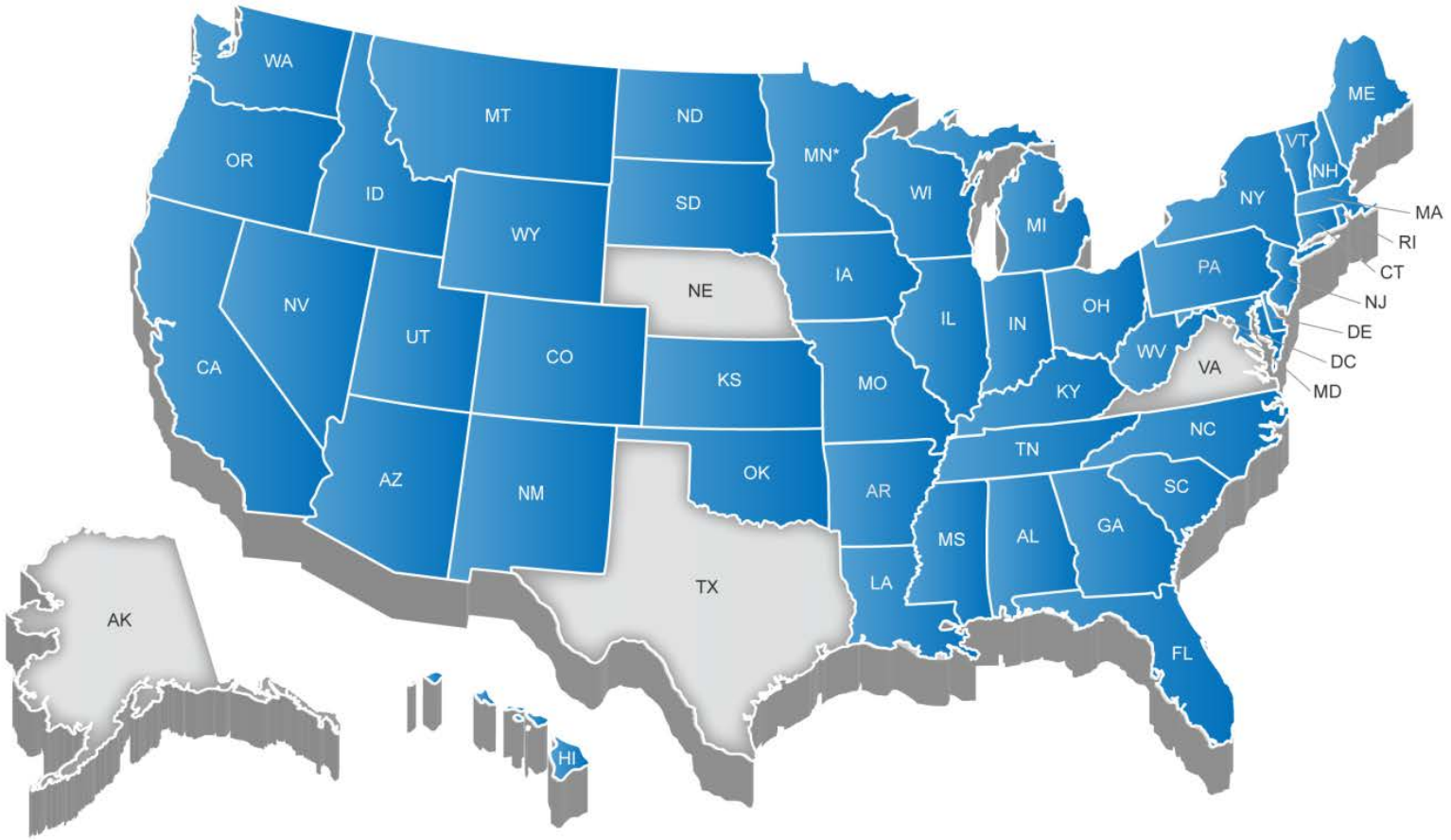


Fig. 1. The structure of education in the United States (Snyder and Dillow 2015)

45 States + DC Adopted the Common Core State Standards (2013)



http://www.corestandards.org/about-the-standards/development-process/

Leadership: Complex Systems

- **Classroom** – students, teachers, and mathematics
- **Teaching & Learning** – content, instruction, assessment, professional culture

Public

Private

Charter

Online/Virtual

21st Century Learning

STEM

Coding
Computer Science

Student Centered Learning

Personalized Learning

Formative Assessment

State Assessments

PARCC

Smarter Balance

SAT & ACT

Leadership: Complex Systems

- **Teacher Development** – teacher preparation, novice, experienced
- **Knowledge** – mathematics, specialized content knowledge for teaching mathematics, pedagogical, curriculum, students

4 Year Universities and Colleges

2 Year Colleges

Online Degrees

State Certification

Alternative Certification Programs

Mathematics

Mathematics Pedagogical Content Knowledge

Pedagogical Content Knowledge

Curriculum Knowledge

Leadership: Complex Systems

- **Supports** – time, resources, specialist, coaches, and leaders

University

Educational Centers

Textbook Publishers

Professional Development Providers

Open Education Resources

Creative Commons

Entrepreneurialism

Leadership: Networks

NCTM NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS

LEADERSHIP IN MATHEMATICS EDUCATION NCSM NETWORK COMMUNICATE SUPPORT MOTIVATE

AMTE

RCML

CBMS

ASA AMERICAN STATISTICAL ASSOCIATION Promoting the Practice and Profession of Statistics

AMATYC

MAA MATHEMATICAL ASSOCIATION OF AMERICA

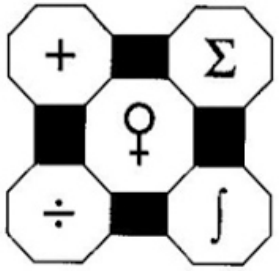
TODOS

TODOS: Mathematics for ALL
Excellence and Equity in Mathematics

AMERICAN EDUCATIONAL RESEARCH ASSOCIATION
Special Interest Group
Research in Mathematics Education

nacctep

SSMA School Science and Mathematics Association
Founded in 1901



NATIONAL ASSOCIATION OF MATHEMATICIANS

AMS AMERICAN MATHEMATICAL SOCIETY

The Relationship between Districts and State Policy

The Case of Tucson, Arizona

Chelsea McIntyre

6th / 7th grade math teacher

Tucson, AZ

School Control

- Race to the Top
- Title IX
- No Child Left Behind

Fig. 1

U.S. Department of Education

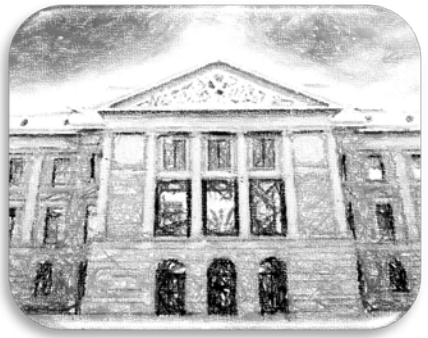


Fig. 2

State Department of Education

Fig. 3

Local School District Governing Board

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Fig. 1 *US Dept of Ed seal* commons.wikimedia.org; Fig. 2 [Skidmore] *The Arizona Capitol Museum building in Phoenix* commons.wikimedia.org;
Fig. 3 *Business Meeting Clipart* wordartsme.com

LOCAL CONTROL

- A long-standing tradition of local control exists in the U.S.
- 56% of Americans surveyed by Gallup in 2014 report an opinion that **local school boards** should have the greatest influence on what is taught in schools; 28% think that power should lie with the state, and only 15% say the Federal Government should have the greatest influence. [1]

46th Annual PK/Gallup Poll of the Public's Attitudes Toward the Public Schools; May 29 – June 20, 2014

Various Stakeholders

- Parents
- Students
- Teachers
- Administrators
- Community Members
- Local Government
- State Government
- Federal Government
- Policy Makers
- Business
- Unions
- Text & Test Publishers

Conflicts of Control

Fig. 4

Bilingual Education

- 63% of Arizonans voted for Proposition 203 in 2000, limiting access to bilingual education for English Language Learners [2]

Ethnic Studies

- The Mexican American Studies program in Tucson Unified School District was dismantled following passage of House Bill 2281 in 2010 [3]
- AZ State Superintendent of Schools Tom Horne authored the bill with the aim of shutting down the TUSD program, despite support from the program's teachers, parents and school district [4]
- Schools in California and Texas formed their own Ethnic Studies classes following the ban; some districts now require Ethnic Studies courses for graduation [4]

Fig. 4 [Arohletter1] Arizona openclipart.org

Notes

- 1 - 46th Annual PK/Gallup Poll of the Public's Attitudes Toward the Public Schools; May 29 – June 20, 2014
- 2 – State of Arizona Official Canvass, 2000 General Election; http://apps.azsos.gov/election/2000/General/Canvass2000GE.pdf. Access 18/7/2016
- 3 – Cabrera, N. "The Fight for Mexican American Studies in Tucson." *The North American Congress on Latin America*; website. https://nacla.org/article/fight-mexican-american-studies-Tucson. Accessed 18/7/2016
- 4 – Phippen, JW. "How One Law Ban.ning Ethnic Studies Led to its Rise." *The Atlantic*. http://www.theatlantic.com/education/archive/2015/07/how-one-law-banning-ethnic-studies-led-to-rise/398885/. Accessed 18/7/2016

Critical Differences Between US and Finnish Education

- Elizabeth Radday

Philosophical Differences

- Finland philosophy: No dead ends through the paths of education. University is for some (professional degrees and researchers).
- US philosophy: More narrow pathway through education. College for all.

Upper Secondary School

- In Finland about 50% of students go to vocational school and 50% go to general upper secondary school
- In the United States almost all students go to general upper secondary school (vocational school is rarely an option)

Course Design

- In Finland courses are shorter (less than 10 weeks long) and are focused on a few specific skills. There are 5 or 6 short terms each year. Classes do not meet daily.
- In the US most courses are for the full academic year and meet daily.

Core Requirements

- Finnish students can complete either the “basic” math requirements (6 courses) or “advanced” requirements (10 courses plus specialization courses)
- US math requirements vary by state and are between 2 and 4 full year courses (Algebra I, Geometry, Algebra II, Precalculus)

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